

CLAIMS

1. An electrode comprising a metallised carbon-insulator composite.
2. An electrode as claimed in claim 1, wherein the metallised carbon-insulator composite is a ruthenium-modified carbon-insulator composite.
3. An electrode as claimed in claim 1, wherein the metallised carbon-insulator composite is a platinum or rhodium modified carbon-insulator composite.
4. An electrode as claimed in any one of claims 1 to 3, wherein the metallised carbon-insulator composite is a metallised carbon-epoxy composite.
5. An electrode as claimed in any one of claims 1 to 4, wherein the volume fraction of the metallised carbon in the metallised carbon-insulator composite is in the range of 15 to 45%.
6. An electrode as claimed in any one of claims 1 to 5, for use in the detection and/or measurement of free available chlorine by electrolysis.
7. An electrode as claimed in any one of claims 1 to 5, for use as a component of a fuel cell, primary or secondary cells for batteries, electrolyzers and electrochemical reactors.
8. A method for the manufacture of an electrode as claimed in any one of claims 1 to 7, which comprises the preparation of a metallised carbon-insulator composite.
9. A method as claimed in claim 8, wherein the metallised carbon-insulator composite is a ruthenium-modified carbon-insulator composite.
10. A free available chlorine sensor incorporating an electrode made from a metallised carbon-insulator composite.
11. A free available chlorine sensor as claimed in claim 10, wherein the metallised carbon-insulator composite is a ruthenium-modified carbon-insulator composite.
12. A free available chlorine sensor as claimed in claim 10 or 11, wherein there are two or more electrodes arranged in parallel.